



ESTABLISHED  
MMXX

# AFVENTURES

Year In Review

# Year in Review

- AFVentures - Investment Thesis and Funding Strategy
- Execution - Since 2018
- Portfolio Composition
- Venture Capital Partnerships
- Returns - Transition and New Opportunities





**“New commercial technology will change society and, ultimately, the character of war. The fact that many technological developments will come from the commercial sector means that state competitors and non-state actors will also have access to them, a fact that risks eroding the conventional overmatch to which our Nation has grown accustomed. Maintaining the Department’s technological advantage will require changes to industry culture, investment sources, and protection across the National Security Innovation Base.”**

2018 National Defense Strategy

# AFVentures Investment Thesis

## Our competitive environment

- Fifty years ago, the nation's best technologies were generated inside the government — the majority funded by the Department of Defense. Today, technological innovation is the domain of global, privately backed commercial technology markets.

## Our investment thesis

- AFVentures expands the Department of the Air Force's (DAF's) innovative capabilities by matching operator needs with private sector solutions. We incent solution providers — specifically, small businesses and startups — to work with the DAF by providing both access to Air and Space Force markets while simultaneously providing capital to support the research, development, test and evaluation of their solutions within those markets. We're successful when companies can both meet the needs of the DAF while simultaneously developing strong commercial, non-defense markets.

## Outcomes

- Leverage commercial technology to deliver improved capabilities to our Airmen & Guardians, faster.
- Strengthen the competitive free enterprise system and the national economy through dual-use tech.

# AFVentures Strategy

*Develop/manage an easy-to-use open front door for innovative ideas*

**(Open Topic Program)**

*Affordably scale ideas by project-based co-investment*

**(Supplemental Funding Pilot Program)**

*Develop/execute new financial instruments to grow dual-use companies*

**(Strategic Investment)**

## OPEN AND SCALE

Open Topic SBIR/STTR – Present



### Feasibility

Up to \$50,000 per award  
1000-1500 awards per year  
Triannual Solicitation Opening



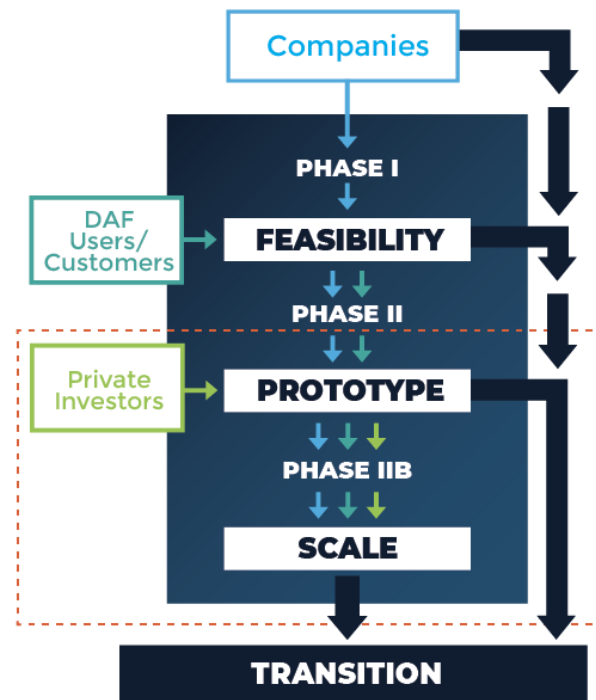
### Prototype

Up to \$750K for initial award  
Matched funding encouraged  
300-500 awards per year



### Scale

Up to \$15M (SBIR) Awards  
20+ Awards per year  
Matching funding required  
Annual Solicitation



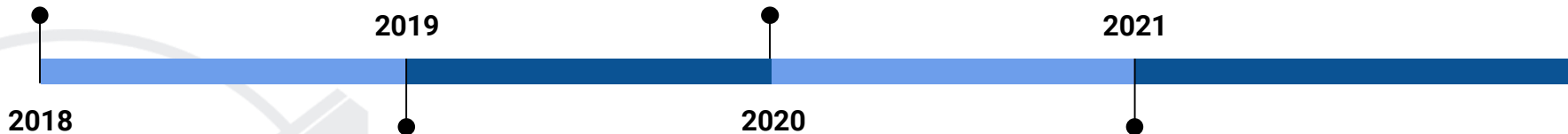
# History

## AFWERX Launches “Open Topic”

First Open Topic released, focusing on expanding DAF access to new ideas as proposed by industry.

## AFWERX 2.0 creates “AFVentures”

AFVentures created to support Open Topic and related initiatives. Combined with “Prime” and “Spark” Divisions in AFWERX 2.0. STRATFI program begins.



## DAF SBIR/STTR CoE starts

DAF SBIR/STTR “Center of Excellence” centralizes contracting & finance activities to increase timeliness and expand DAF SBIR/STTR expertise

## SBIR CoE Merged w/ AFWERX

SECAF appoints AFWERX Director as DAF Chief Commercialization Officer, and moves SBIR/STTR Program within AFWERX. TACFI program begins.

# Execution




The background features a dark blue-to-green gradient. Overlaid on this are several faint, light-blue geometric shapes: a large triangle on the left, a diamond in the center, and various smaller hexagons and squares scattered across the field. A subtle grid of small dots is also visible.

# \$1.12B

Dollars Executed through  
AFVentures to Date



# Execution by the Numbers

	Pre-AFWERX		AFWERX				Change with AFWERX	
	2017	2018	2019	2020	2021	Trend	from 2017 to 2021	
EXECUTION								
Total Budget (all of DAF SBIR/STTR)	\$402M	\$634M	\$793M	\$884M	\$919M		+ \$517M Total budget	2.3X
Timeliness (% awarded under 180 days)	42%	54%	75%	85%	91%		+ 49% On time awards	2.2X
Growth in proposals in a single topic	62	279	628	1,615	1,760		+ 1,698 Proposals submissions in a single topic	28.4X

Private Match:  
**\$483M**  
(35% increase in 2021)

Government Match:  
**\$204**  
(20% increase in 2021)

# Portfolio

The background features a dark blue-to-green gradient. Overlaid on this are several faint, light-colored geometric shapes: a large triangle on the left, a hexagon in the upper left, and various smaller circles and diamonds scattered across the field. A subtle grid of dots is also visible.

# 1,814

Companies who have partnered with  
AFVentures

# Portfolio Review - 2018 to Present Day

Open Topic at a Glance

**1,814**  
Companies

**73%** Have 25 or Less  
of Companies Employees

Average Age of Company is  
**9** Years

**37.3%**  
Self-Certified Small  
Disadvantaged Business

**12%**  
Minority Owned Business

**6.6%**  
Disabled Veteran  
Owned Business

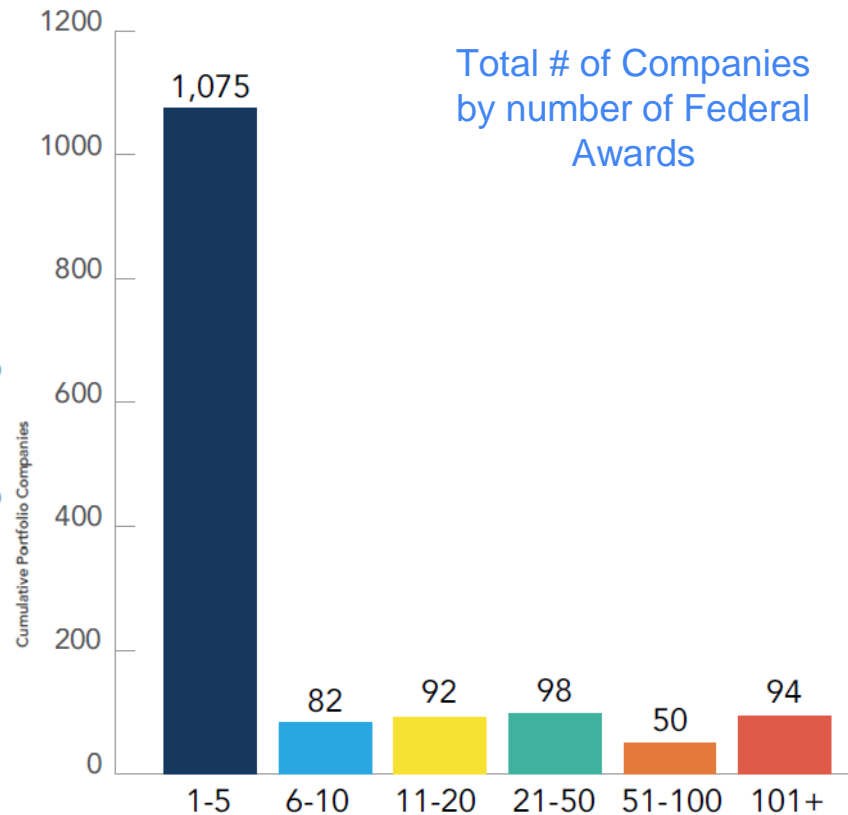
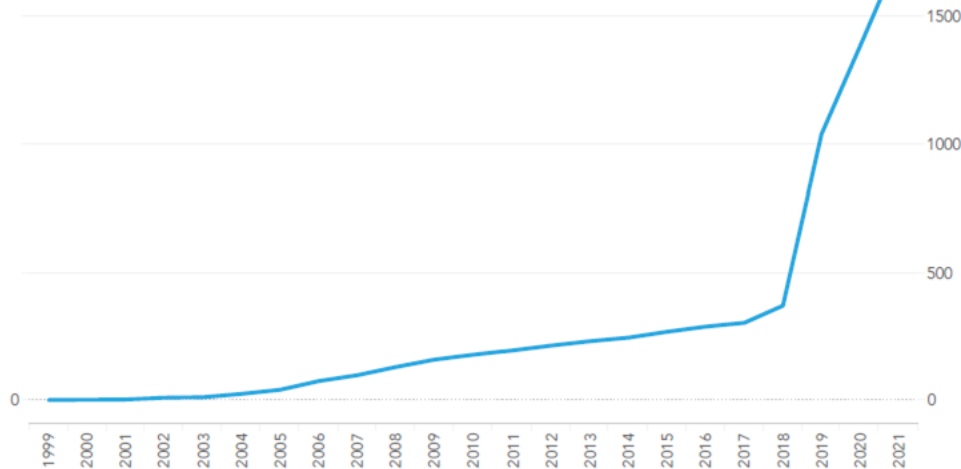
**>75%** received their first Air Force SBIR/  
STTR contract through AFVentures

**27%**  
of Companies are Receiving  
Private Investments

# The Open Topic Investment Platform

1,143

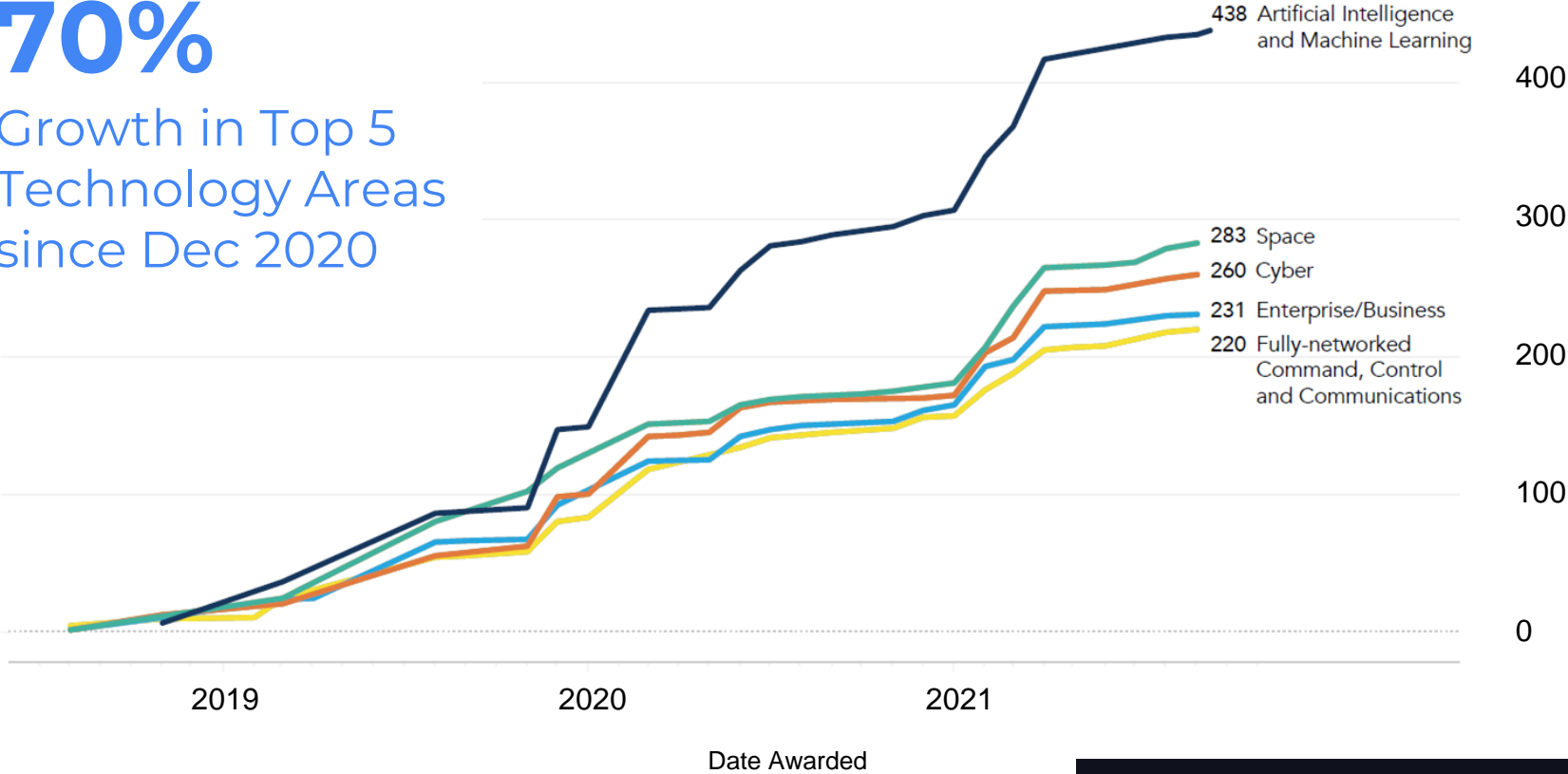
portfolio companies got their DAF  
start with AFVentures



# Technology Sectors

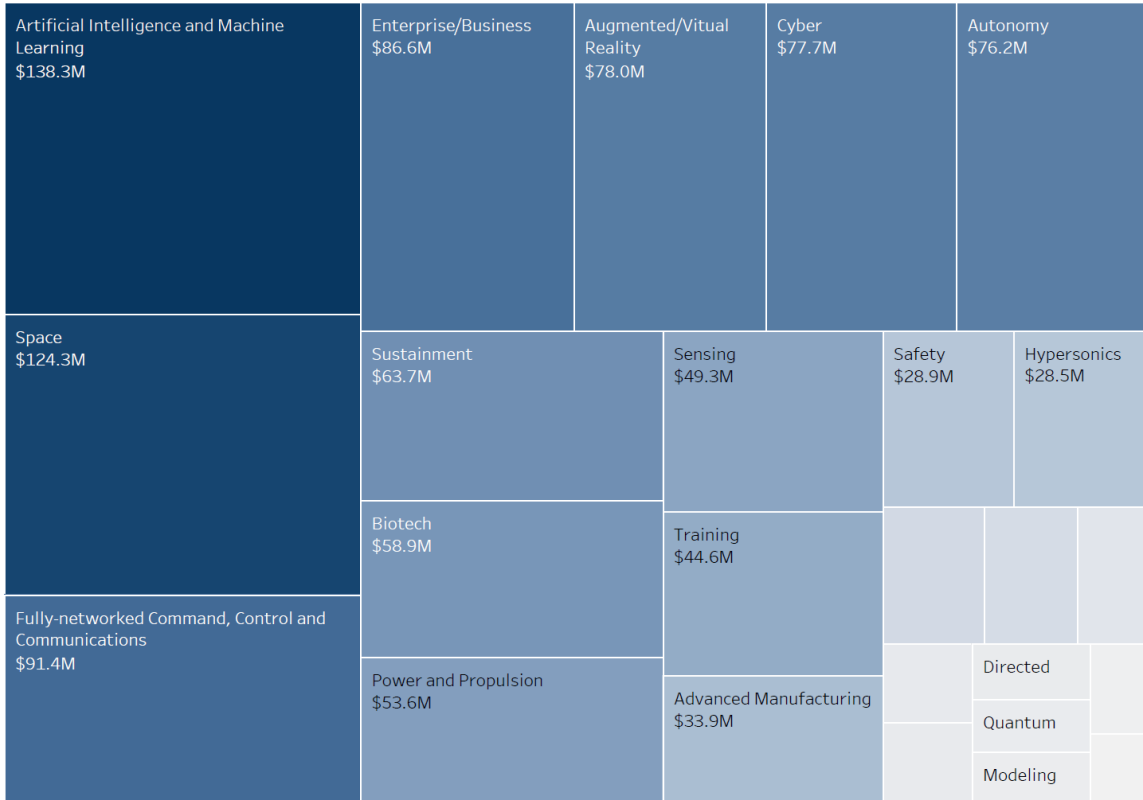
70%

Growth in Top 5  
Technology Areas  
since Dec 2020



# Investment by Technology Sector

AFVentures awards by technology area



45%  
of AFVentures  
Funding went to the  
top 5 technology  
sectors

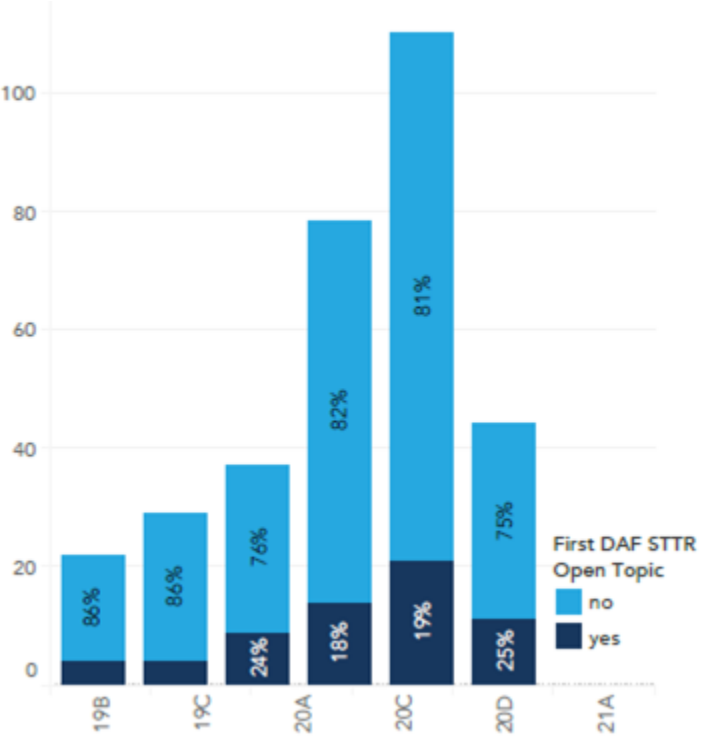
# Research Institutions

Added  
**54**  
new research  
institutions to  
the DAF STTR  
Portfolio

Research Institutions by Type

Set Aside Type	
1862 Land Grant College	30
1890 Land Grant College	8
Educational Institution	146
Federally Funded Research and Development Corp	1
Foundation	4
Hispanic Servicing Institution	9
Historically Black College or University	6
Minority Institution	12
Non-Profit Organization	73
Private University or College	42

Research Institutions New to DAF, by Cycle

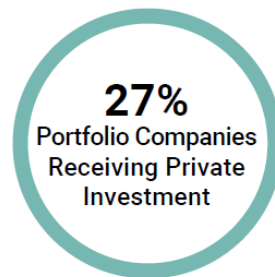
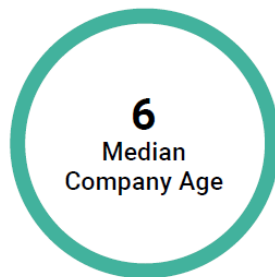




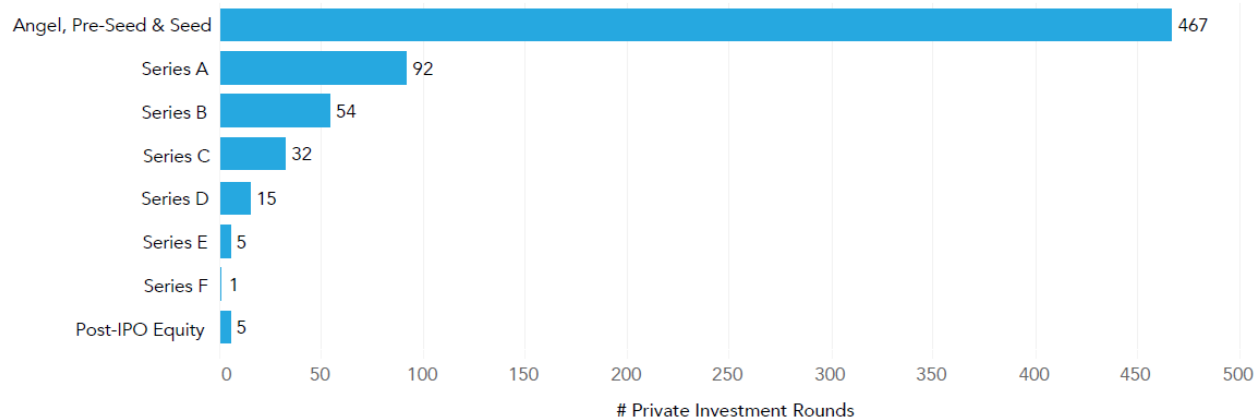
# Venture Capital Across the Portfolio

661

AFVentures  
companies are  
currently venture  
backed



Venture Capital Investment in AFBventures Companies



# Venture Investment



# \$8.9B

Follow-on Private Investment

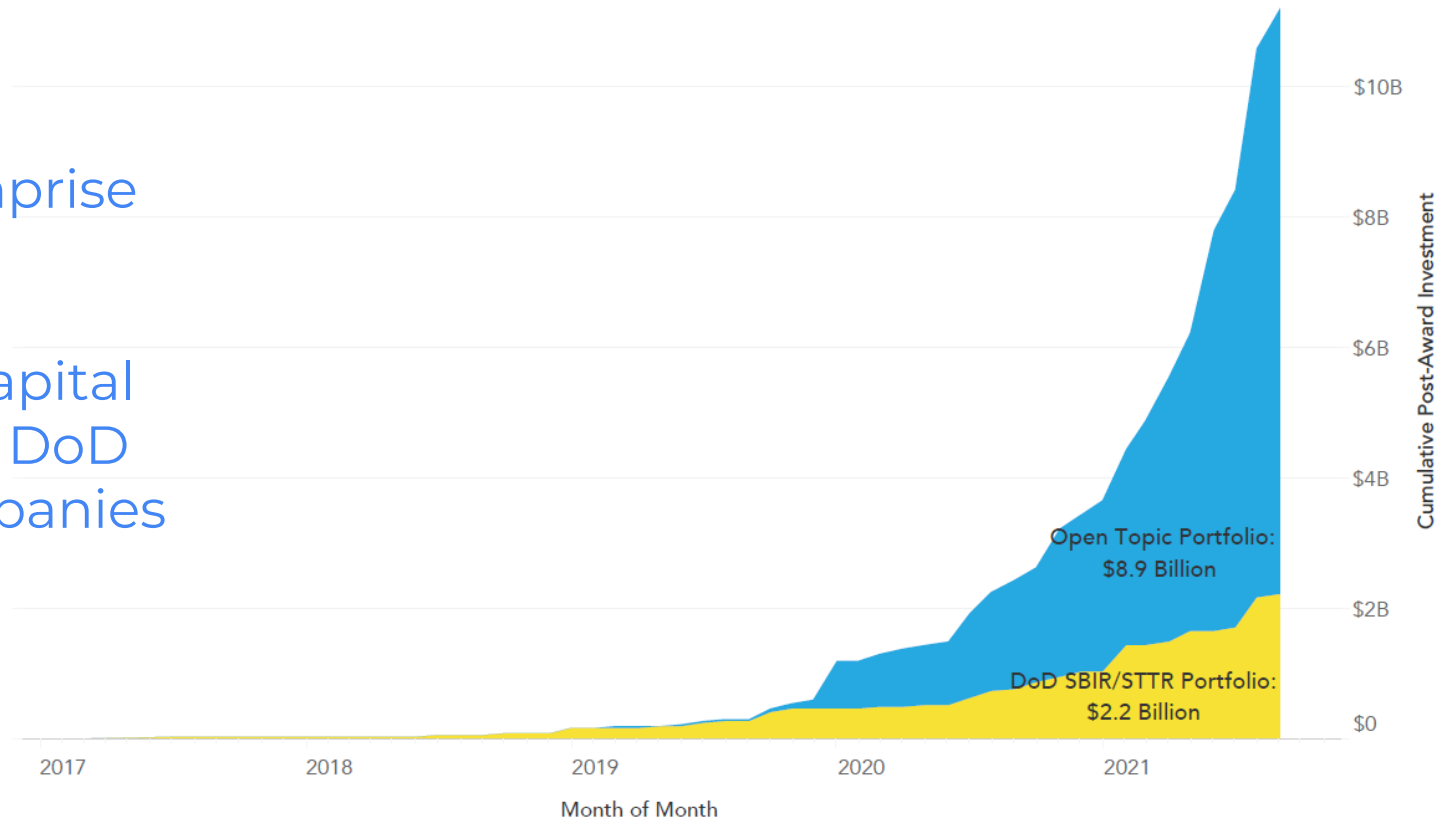
# Total DoD SBIR/STTR Post-Award Investment

Open Topic vs. DoD SBIR/STTR Post-Award Private Investment

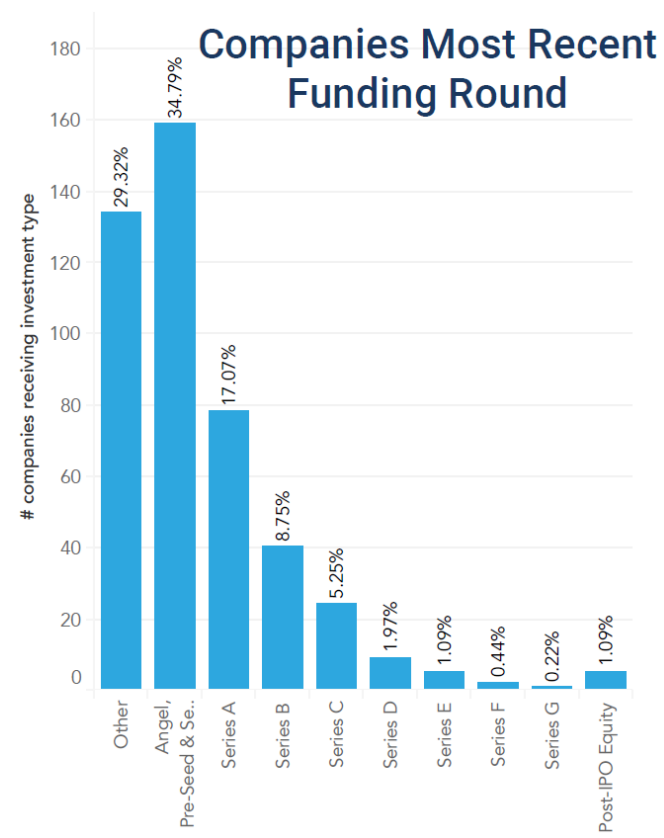
AFVentures  
companies comprise

**80%**

of all Venture Capital  
dollars going to DoD  
SBIR/STTR companies  
since 2018

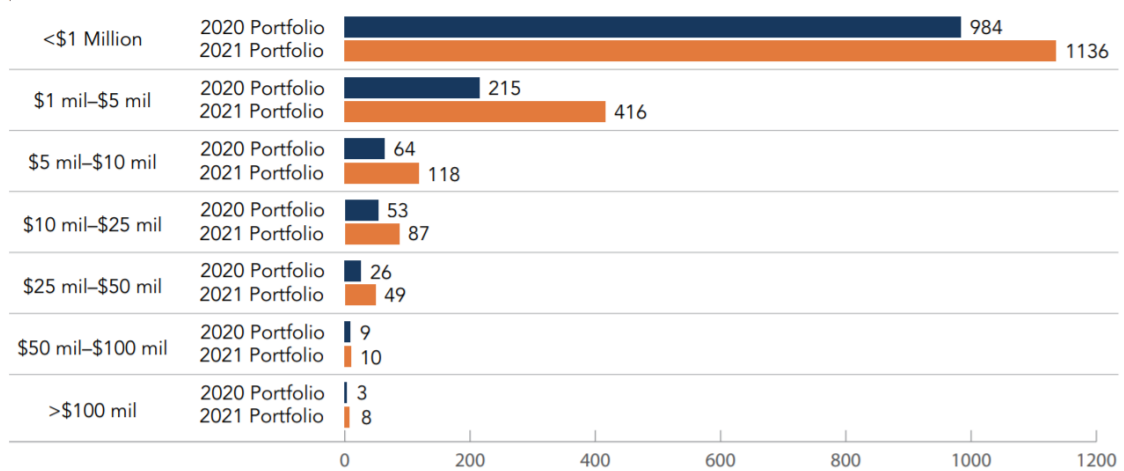


# Portfolio Review

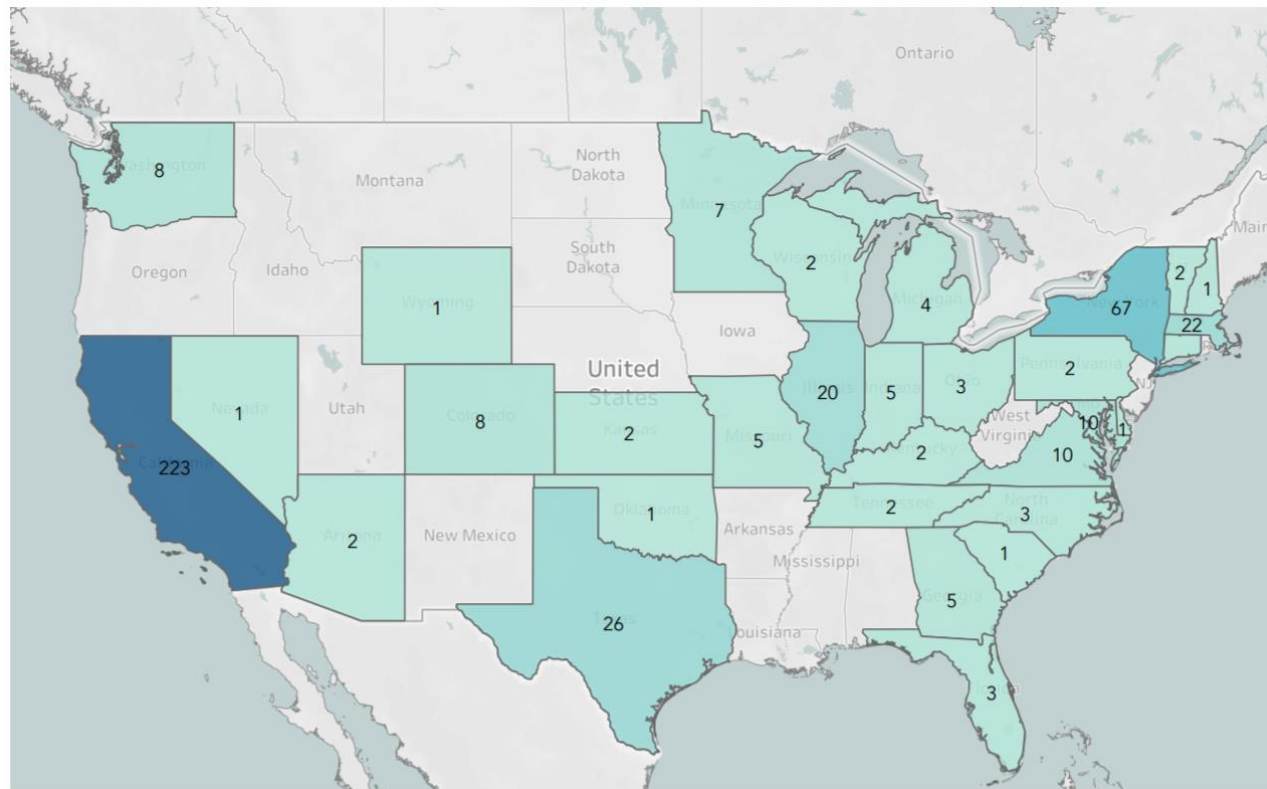


14  
portfolio companies valued over  
\$1B

### Portfolio company revenue (\$ millions)



# Venture Capital Partnerships



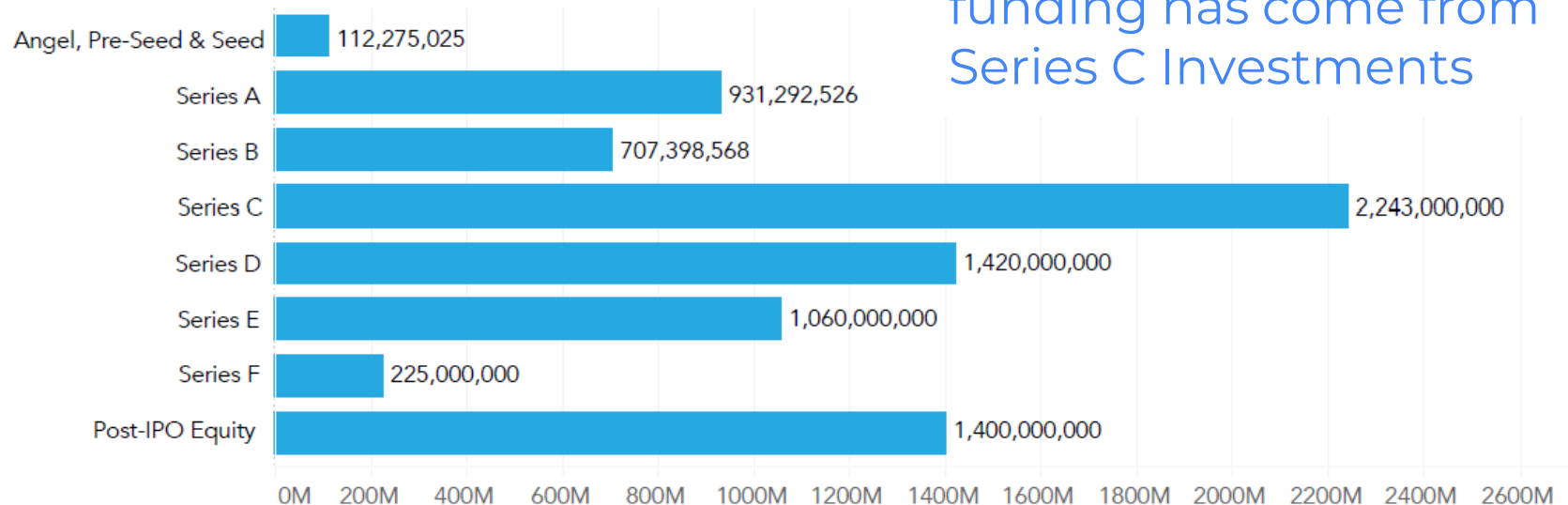
449

unique investors  
participated in  
investment  
rounds for Open  
Topic portfolio  
companies.

# Venture Capital Partnerships

## Portfolio Company Post-Award Funding Rounds

AFVentures Post-Award Private Investment Rounds (value)



**25%** of post-award funding has come from Series C Investments

# Transition



# \$2.8B

Follow-on Government Revenue  
(i.e., Not SBIR/STTR R&D)

# Transition Outcomes

1,173

Companies received at least one *government* contract or *private* investment round subsequent to their first Open Topic award

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65

Companies received only *private* post award funding

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965

Companies received only *government* post award funding

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143

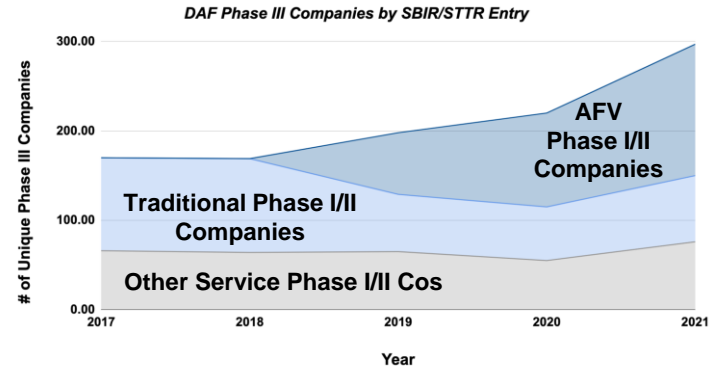
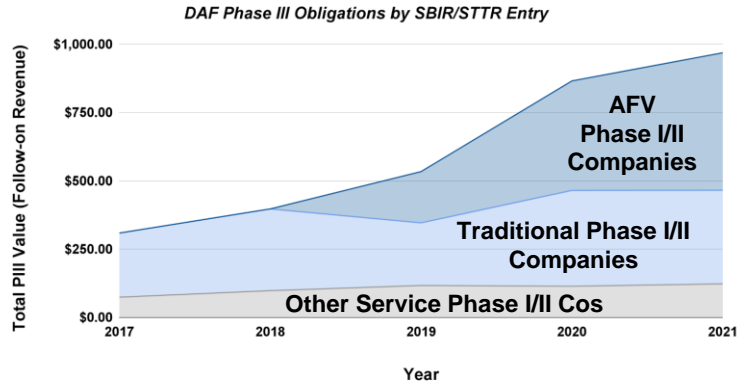
Companies received post award funding from both *private* and *government* entities

53%

of portfolio  
companies have  
transitioned  
technology to date

# DAF SBIR/STTR Transition since 2017

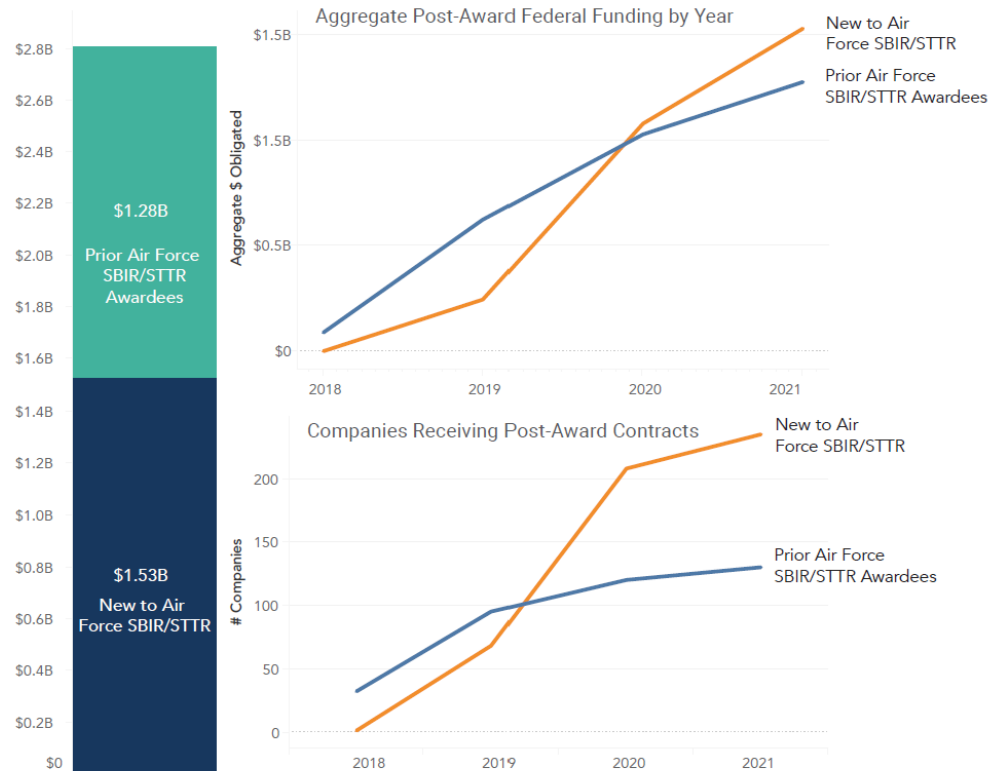
	Pre-AFWERX		AFWERX			Trend	Change with AFWERX	
	2017	2018	2019	2020	2021		from 2017 to 2021	
TRANSITION								
DAF Phase III Dollars	\$309M	\$398M	\$534M	\$866M	\$977M		<b>+ \$660M</b> Phase III dollars awarded	3.1X
DAF Phase III Companies	171	170	199	225	292		<b>+ 121</b> Phase III companies	1.7X
Follow-on Private Capital Dollars	\$45M	\$50M	\$200M	\$2.2B	\$6.7B		<b>+ \$6.6B</b> Private follow-on funding	146X



# Transition Outcomes, by Origin

## Open Topic Companies' Total Post-Award Government Funding

Open Topic Companies' Total Post-Award Gov't Funding



Rookie and Veteran DAF SBIR/STTR companies are successful in transition, with new entrants accounting for

**54%**

of all non SBIR/STTR follow-on transition revenue since 2018.

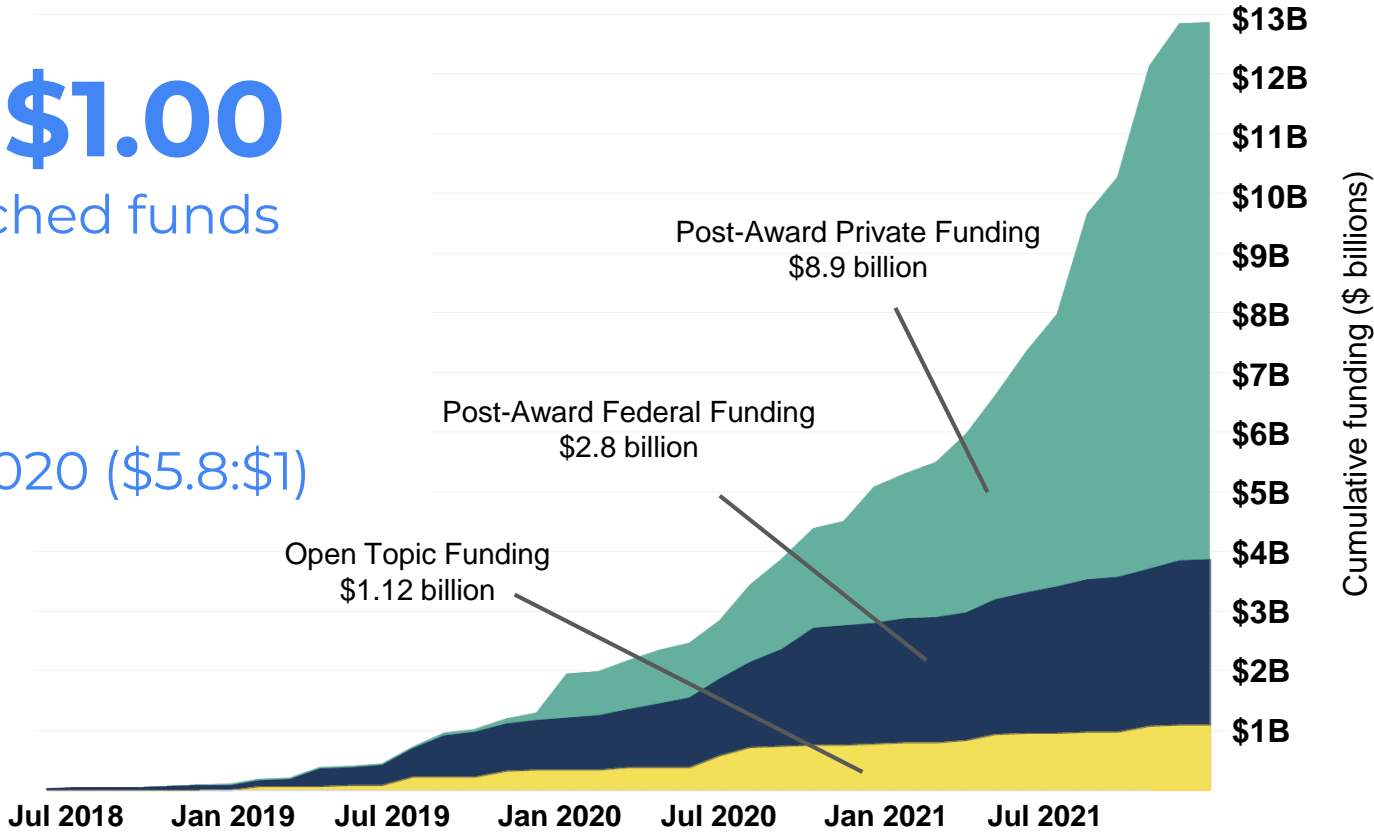
# Returns on Investment

**\$10.51 : \$1.00**

Including matched funds

**81%**

Growth from 2020 (\$5.8:\$1)



# Upcoming Opportunities

## The Next Open Call is Out!

- Solicitation Open :  
**Jan 12 - Feb 10**
- Next AMA is **16 Dec**:  
<https://www.afsbirsttr.af.mil/Events/AFVentures-Weekly-Webinar-Series/>
- Visit **AFWERX.com** for more information



# Questions